

VIDEO

FAQ

Q I've heard there's a new version of HDMI. Will this make my HD TV obsolete?

A The new standard, HDMI 1.3, is backwards compatible with older devices and introduces new features for new devices, so your TV won't be obsolete. The original HDMI 1.0 standard is capable of carrying up to 1,080p video at 60fps along with eight-channel 24-bit audio. This is easily sufficient for today's HD TV sets and surround-sound amplifiers. Versions 1.1 and 1.2 were minor updates, which added support for DVD Audio and Super Audio CD respectively.

Version 1.3 increases the data bandwidth from 4.9GB/s up to 10.2GB/s allowing for higher display resolutions in the future. More importantly, there's support for superior surround-sound standards such as Dolby TrueHD and DTS-HD Master Audio. This will allow an HD disc player to transmit the full digital audio from the disc to a compatible surround-sound amplifier.

Seth Barton

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PANASONIC HDC-SD1

★★★★

£852 inc VAT

Most HD camcorders use the High Definition Video (HDV) format. This uses 25Mbit/s MPEG2 video, which is stored on 13GB Mini-DV tape. Tape isn't the most convenient storage format, though, as you have to transfer the footage to a PC in real time before it can be edited.

Panasonic's 1080i HDC-SD1 is the first camcorder we've seen to use a new format called Advanced Video Codec High Definition (AVCHD). AVCHD uses the more advanced H.264 codec for better video compression, requiring just 13Mbit/s for high-quality footage. The lower bit rate means that AVCHD video requires less disk space than HDV footage.

This is one of the reasons why Panasonic has chosen to use SD memory cards for its HDC-SD1. As a 2GB card can store only 20 minutes of footage, Panasonic has also provided support for SD High Capacity (SDHC) cards and includes a 4GB card in the box. This will hold 40 minutes of video, which is good enough for many purposes but isn't enough for a wedding or holiday. You can also buy 8GB cards for around £40, which will give you a more respectable 80 minutes of video.

The key advantage to using memory cards is the easy transfer of video to your PC. Sadly, you'll probably need a new memory card reader to read SDHC cards. Alternatively, you can hook up the camcorder to your PC using the USB interface.

The HDC-SD1 is the first we've seen with an HDMI connector, so you can easily connect it to your HD TV for playback. Alternatively, component output is provided for those with older HD TVs.



The camcorder is compact and attractively curvy. It has all the features you'd expect on a camcorder at this price, including optical image stabilisation, an automatic lens cover and a high-resolution 3in LCD. There's no viewfinder, with the rear taken up by easy-to-use controls. The battery is tucked away inside, which looks neat but prevents you fitting a larger one. Fortunately, it lasted for an impressive 88 minutes of continuous shooting. There are only basic manual controls, and there's no accessory shoe, either, so the HDC-SD1 is very much a point-and-shoot camcorder for casual users.

It uses three CCDs together to capture video. Colours are accurate, there's plenty of detail and the camcorder dealt well with a variety of lighting conditions. In good lighting it can't compete with Canon's HV10, displaying more noise and less well-

defined edges. However, it's still a big step up from even the best standard-definition camcorders.

This is a compact camcorder that's simple to use. Video quality doesn't quite match up to the HDV models we've seen, though, and using SDHC cards is more expensive than tape. Still, it's undoubtedly a well-designed camcorder and if you're desperate to move away from tapes it's a good alternative, though a little expensive.

Seth Barton

SUMMARY

- ✓ Shoots good-looking video
- ✓ No tapes to capture to PC
- ✗ Uses expensive SDHC cards

HD CAMCORDER SDHC storage, 12x optical zoom, 3x 1/4in 560,000 pixel CCDs, 3in LCD screen, HDMI, component, composite and phono output, USB Hi-speed interface
PART CODE HDC-SD1EG-S
SUPPLIER www.dabs.com
DETAILS www.panasonic.co.uk

PERFORMANCE (see page 56)



Also consider...

SLINGMEDIA Slingbox

★★★★★

£150 inc VAT



The Slingbox allows you to watch television anywhere in the world, as if you were sitting in your own living room. It has SCART and S-video inputs, so you can plug in whichever set-top boxes you want. It's simple to use, and even includes onscreen mock-ups of your remote controls.

This is a great product that's essential if you can't live without your TV.



VIDEO-STREAMING DEVICE SCART and S-video inputs, Freeview tuner, IR transmitter, 10/100 Ethernet port
PART CODE SB150-110 SUPPLIER www.pcworld.co.uk DETAILS www.slingmedia.com
✓ Works well with set-top boxes; easy to set up
✗ Can't timeshift Freeview FULL REVIEW Sep 2006

FREECOM DVB-T USB Stick

★★★★★

£23 inc VAT

This was the best digital USB tuner in our Labs test in *Shopper* October 2006. It's easy to get up and running and found all the expected Freeview TV and radio channels. Video quality from our rooftop aerial was very good. There's an excellent EPG, so it's easy to plan your viewing and schedule recordings. Sadly, the included mini remote can't control the EPG, having just basic buttons for changing the channel and volume.

Still, at £28 including VAT, you won't find a cheaper or simpler way of watching and recording Freeview TV on your computer.



USB DIGITAL TV TUNER USB Hi-Speed interface, RF input
PART CODE 25451 SUPPLIER www.amazon.co.uk
DETAILS www.freecom.com
✓ Good value; good EPG
✗ Poor remote control FULL REVIEW Oct 2006

TERRATEC Grabster AV400 MKII

★★★★★
£83 inc VAT



If you have a stack of analogue video tapes that you want to make digital, Terratec's USB Grabster AV400 MKII can help. It captures analogue video to your computer's hard disk as MPEG2 video, which you can then edit or burn directly to disc.

You can capture video via the composite or S-video ports, as well as stereo sound. The results from our test files were excellent, with the digital video looking clean and sharp. The AV400 has a hardware video encoder, so your PC needs just an 800MHz processor.

The AV400 comes complete with Ulead's DVD Moviefactory 5 (which received four stars in *What's New, Shopper* July 2006) to help you author DVDs. The video-editing functions are limited, but good enough for cutting video length.

The Grabster AV400 MKII is quite expensive considering many hybrid TV cards offer similar features for a significantly lower price. However, its hardware encoding makes it a good choice for people with older, less powerful PCs.

Seth Barton

SUMMARY

- ✓ Good software
- ✓ Clean video captures
- ✗ Quite expensive

VIDEO CAPTURE DEVICE USB2 interface, S-video, composite video and phono inputs
PART CODE 10014
SUPPLIER www.komplett.co.uk
DETAILS <http://uk.terratec.net>

PINNACLE Studio MovieBox USB

★★★★★
£76 inc VAT



Like Terratec's Grabster AV400 (left), Pinnacle's Studio MovieBox captures analogue video to your PC via USB. It lacks the AV400's hardware video encoder, which means your PC has to do all the hard work when capturing video, and requires at least a 1.4GHz processor. It will capture video in a wider variety of video formats, however, including DivX. The results looked generally fuzzier and noisier than the AV400's efforts.

The MovieBox can also capture DV video from a digital camcorder thanks to its FireWire port. Pinnacle has included a full version of its video editing software, Pinnacle Studio 10.6. We really liked the interface of version 10.5 when we reviewed it in *What's New, Shopper* July 2006, although it was plagued by random crashes. This version seems more stable, and we suffered no crashes during testing.

The Studio MoveBox USB is a good choice for those needing both analogue and digital video capture. However, the AV400 captures cleaner-looking analogue video and is the better product for that job.

Seth Barton

SUMMARY

- ✓ Powerful editing software
- ✓ FireWire port
- ✗ Noisy analogue video capture

VIDEO CAPTURE DEVICE USB2 interface, FireWire, S-video, composite video and phono inputs PART CODE 230100116
SUPPLIER www.misco.co.uk 0800 038 8880
DETAILS www.pinnaclesys.com

CHOOSING A... TV Card

Follow the steps to find your ideal specs

INTERFACE: PCI
TUNESTO: Analogue
INPUTS: Radio frequency (RF)
CAPTURE FORMAT: N/A
HARDWARE COMPRESSION: No
Recommended minimum in grey

1 TV cards connect to PCs through a variety of interfaces. Internal cards fit into PCI or PCI-E x1 slots. Some double as graphics cards and use an AGP or PCI-E x16 slot. External devices with USB interfaces are easier to install but use up a USB port. USB stick and PC Card versions are also available, and are ideal for notebooks.

2 Most devices tune to either analogue or digital TV broadcasts from an external aerial, but hybrid devices can receive both types of broadcast. Terrestrial digital TV, or Freeview as it's commonly known in the UK, provides extra free channels, but you can't access subscription channels with a TV tuner card. Analogue broadcasts can give a superior picture to digital broadcasts, but digital tuners don't suffer from noise and ghosting when reception is poor – although they may cut out altogether. Check the digital reception in your area by going to www.freeview.co.uk and entering your postcode.

3 Basic devices provide an RF input for connecting an aerial. To connect an analogue video device, such as a camcorder or VCR for video editing, look for a composite or, preferably, S-video input. Digital tuners tend not to include this feature. Buy a hybrid device if you want to receive digital TV and capture analogue video.

4 If you want to use your PC for video editing or as a digital video recorder, you'll need to capture video in an appropriate compression format. The most practical format is MPEG2, which gives excellent quality and reasonable file sizes.

A PC with a 1GHz or faster processor can compress video to MPEG2 format in software, while slower machines need hardware compression on the card. Digital TV is broadcast in MPEG2 format, which makes recording to disk easy. Expect an hour of MPEG2 video to take up roughly 1.5GB of hard disk space.

5 Factor in any extras you want, such as an FM radio, a remote control and software for scheduled recordings and pausing live TV.

TERRATEC Cinergy DT USB XS Diversity

★★★★★
£79 inc VAT



This USB TV tuner uses diversity to take a signal from two tuners and aerials to improve reception in areas with weak signal strength. Alternatively, you can use the tuners independently to receive one programme while recording another.

The included software is easy to use, image quality is good, and the remote control is clearly labelled. It's the best dual tuner we've seen.

USB TV TUNER USB2 interface, dual digital tuners, 2x RF inputs
PART CODE 10456 SUPPLIER www.pixmania.co.uk DETAILS <http://uk.terratec.net> ✓ Twin tuners with diversity; can schedule two recordings at once ✗ No timeline EPG FULL REVIEW Oct 2006



HUMAX Duovisio PVR-9200T

★★★★★
£173 inc VAT

The Duovisio has twin digital tuners to receive Freeview broadcasts, so you can watch one programme while recording another, or record two programmes at once.

The 160GB hard disk can hold around 100 hours of recorded shows and enables you to pause and rewind live TV. Its interface makes it easy to browse channels and schedule recordings from the one-week EPG. The only disappointment is in its inability to schedule entire series as you can with Sky+. Otherwise, it's a great buy.

HARD DISK RECORDER Two digital tuners, 160GB hard disk, RF input, two SCART, RF, composite, stereo phono, optical S/PDIF output, USB PART CODE PVR-9200T SUPPLIER www.martindawes.net DETAILS www.humax.digital.com/uk ✓ Twin digital tuner; easy-to-use interface ✗ Minor scheduling problems FULL REVIEW Jun 2006

